

L 46985-66

ACC NR: AT6024913

and elongation per unit length do not change appreciably. The macro- and microstructure of sections pressed under various conditions is relatively fine-grained and homogeneous. The strength characteristics of panels are somewhat higher than those of thin-walled sections. Orig. art. has: 4 figures and 5 tables.

SUB CODE: 11/ SUBM DATE: none

ms
Card 2/2

L 46983-66 EWP(k)/EWT(m)/T/EWP(w)/EWP(t)/ETI IJP(c) JD/HW
 ACC NR: AT6024914 (A, N) SOURCE CODE: UR/2981/66/000/004/0057/0064
 AUTHOR: Archakova, Z. N.; Kovrizhnykh, V. G.; Sandler, V. S.; Shvets, V. A.;
 Lobedeva, N. S.

ORG: none

TITLE: Effect of heating conditions preceding quenching and of the degree of cold deformation after quenching on the mechanical properties and structure of pressed sections of VAD23 alloy

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat resistant and high-strength alloys), 57-64

TOPIC TAGS: METAL DEFORMATION, aluminum alloy, metal pressing, metal heat treatment / VAD23 aluminum alloy

ABSTRACT: The relationship between the structure, mechanical properties, and heating conditions prior to the quenching of pressed sections of VAD23 alloy was determined. The temperature of heating for quenching of pressed semifinished products should be maintained between 515 and 525°C. The elongation coefficient during pressing of sections with a flange thickness up to 10 mm should be between 15 and 25. Straightening of the sections after quenching by the extension method with a degree of deformation of 1-4% decreases the strength characteristics of sections of VAD23 alloy by 2-4 kg/mm² without much change in elongation per unit length. High degrees of cold deformation do

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L 46983-66

ACC NR: AT6024914

not lead to a further change in mechanical properties. A second quenching changes the strength properties of pressed sections from +1.7 to -11.6 kg/mm² and the elongation from +0.9 to -4.5%. The negative effect of overquenching is greater the higher the elongation coefficient during pressing and the degree of cold deformation after the first and second quenching. It is concluded that in preparing pressed semifinished products from VAD23 alloy, it is necessary to limit the degree of deformation during straightening by extension after quenching to 3% and to avoid a second quenching. Orig. art. has: 7 figures and 1 table.

SUB CODE: 11/ SUBM DATE: none

Card 2/2

L 40952-66 EWT(m)/EWP(k)/EWP(t)/ETI IJP(c) JH/JD/HW
 ACC NR: AT6024915 (A) SOURCE CODE: UR/2981/66/000/004/0065/0069

AUTHOR: Mikhaylov, K. N.; Ovodenko, M. B.; Archakova, Z. N.; Chernoskutov, Ye. F.;
Shvets, V. A.

ORG: none

TITLE: Manufacturing procedure and mechanical properties of VAD23-alloy sheets

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat resistant and high-strength alloys), 65-69

TOPIC TAGS: aluminum alloy, copper containing alloy, lithium containing alloy, cadmium containing alloy, manganese containing alloy, titanium containing alloy, metal cladding, metal property/VAD23 aluminum alloy

ABSTRACT: A manufacturing procedure for rolling aluminum-clad VAD23-alloy sheets has been developed. It is proposed that hot rolling be done in two stages. First, the pack, a slab, and a cladding plate are welded together by rolling at 270—340C. The prerolled packs are reheated to 450—500C and rolled into a strip in a continuous mill. Nonclad sheets can be rolled in one stage at 450—500C. It was found that the plasticity in hot rolling of the alloy is greatly affected by the copper and lithium content. Susceptibility to cracking significantly increases when the copper content is above 5.3% and the lithium content is above 1.2%. With this method, sheets 0.5—5.0 mm thick were successfully rolled. Their tensile strength

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L 40952-66

ACC NR: AT6024915

at room temperature was 55—60 kg/mm² and elongation was 2—7%. Orig. art.
has: 5 figures.

[TD]

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 002/ ATD PRESS: 5056

Card 2/2 hs

L 47038-55 EXT(1)/INT(1)/T/INT(1)/EII
ACC NR: AT6024918 (A, N) SOURCE CODE: UR/2981/66/000/004/0085/0106

AUTHOR: Anisimova, N. V.; Archakova, Z. N.; Belyayev, S. Ye.; Danilov, Yu. S.; Kishkina, S. I.; Petrov, Ye. A.; Plekhanova, N. G.; Ponar'ina, T. K.; Radetskaya, E. M.; Strunin, B. M.

ORG: none

TITLE: Mechanical properties of VAD23 alloy

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat resistant and high-strength alloys), 85-106

TOPIC TAGS: aluminum alloy, solid mechanical property / VAD23 aluminum alloy

ABSTRACT: Sections and sheets of VAD23 alloy were tested in the artificially aged / state (16 hr at 170°C). From the standpoint of creep, stress-rupture strength and re-covered strength, the properties of VAD23 are 20-25% higher than those of D16T under long-term performance conditions at 125-150°C. In compression at temperatures up to 150-175°C, the yield points of sheets and sections of VAD23 are 10-20% higher than in extension. From the standpoint of endurance and fatigue strength, VAD23 is not inferior to V95 alloy. VAD23 has a high sensitivity to notching and sharp cracks; sheets of VAD23 alloy display a high sensitivity to notching and cracking as compared to pressed semifinished products. Orig. art. has: 12 figures and 14 tables.

SUB CODE: 11/ SUBM DATE: none / ORIG REF: 003/ OTH REF: 005
Card 1/1 vmb

ACC NR: AR7004873

SOURCE CODE: UR/0276/66/000/009/B042/B042

AUTHOR: Archakova, Z. N.; Kovrizhnykh, V. G.; Sandler, V. S.; Shvets, V. A.;
Lebedeva, N. S.

TITLE: The effects of heating conditions prior to hardening and the amount of cold deformation after hardening on the mechanical properties and structure of pressed sections of VAD23 alloy

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 9B267

REF SOURCE: Sb. Alyumin. splavy. M., Metallurgiya, vyp. 4, 1966, 57-64

TOPIC TAGS: heat effect, cold hardening, mechanical property, cold deformation, alloy

ABSTRACT: Dependence was established between the structure, mechanical properties, and conditions of preheating of pressed sections of the VAD23 alloy prior to hardening. It was recommended that the hardening temperature be maintained within the 515--525 C range. The extrusion ratio is set at 15--25 for a section with a flange up to 10 mm thick. The straightening of sections, following

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UDC: 621.785.6.001.5

ACC NR: AR7004873

hardening by stretching with an amount of deformation of 1—4%, reduces the strength characteristics of the sections by 2—4 kg/mm²; change in the per unit elongation. No changes in mechanical properties occur following higher degrees of cold deformation. Repeated hardening does change the strength characteristics of the pressed sections from +1.7 to -11.6 kg/mm² and the per unit elongation from +0.9 to -4.5%. The negative effect of repeated hardening increases with increase in the extrusion ratio and the amount of cold deformation following primary and secondary hardening. Orig. art. has: 7 figures. [Translation of abstract] [AM]

SUB CODE: 11, 13/

Card 2/2

YUGOSLAVIA/General and Special Zoology - Insects.

P.

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30552

Author : Archanin, B.

Inst :

Title : To the Study of the Biology of the American White Butterfly.

Orig Pub : Glasnik biol. sek. Hrvatsko prirodosl. drushtvo, 1953
(1955), Ser. 2B, 7, 93-94.

Abstract : No abstract.

Card 1/1

- 16 -

ARCHASHNIKOV, V. P.

ARCHASHNIKOV, V. P. -- "Certain Problems of the Statics of Mining Deposits."
Cand Phys-Math Sci, Acad Sci Kazakh SSR, Alma-Ata 1953. (Referativnyy Zhurnal--
Mekhanika, Jan 54)

SO: SUM 168, 22 July 1954

SOV/124-58-4 4626

Translation from: Referativnyy zhurnal, Mekhanika 1958, Nr 4, p 138 (USSR)

AUTHOR: Archashnikov, V. P.

TITLE: On the Calculation of the Optimal Dimensions of Pillars Between Chambers (K raschetu optimal'nykh razмеров mezhdukamernykh tselikov)

PERIODICAL: Izv. AN KazSSR. Ser. matem. i mekhan., 1956, Nr 5 (9), pp 3-28

ABSTRACT: On the basis of the theory of ultimate equilibrium of a cohesionless medium the article presents a solution for the problem of the stress determination in pillars of rectangular section. In the calculation scheme of the solution it is assumed that the compression of the pillar rock is performed between two rough slabs (at the top and bottom of the pillar), and that the stresses acting between the slabs and the rectangle are connected by the equation:

$$|\tau_{nt}| = \sigma_n \tan \psi$$

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SOV/124-58-4-4626

On the Calculation of the Optimal Dimensions (cont.)

where σ_n and τ_{nt} are the normal and the tangential stresses, and ψ is the angle of friction between the rocky medium of the pillar and the rocky media of the roof and the floor. Solutions of the problem are given for the cases when the ratio of the rectangle width to the height is sufficiently large, and also when these values are commensurable. The article presents a numerical example of a stress calculation for the wall.

I. V. Fedorov

1. Beams--Stresses 2. Stress analysis 3. Mathematics

Card 2/2

SOV/124-58-3-3278

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 3, p 106 (USSR)

AUTHOR: Archashnikov, V. P.

TITLE: On a Problem of the Theory of Ultimate Equilibrium (Ob odnoy zadache teorii predel'nogo ravnovesiya)

PERIODICAL: Izv. AN KazSSR, Ser. matem. i mekhna., 1956, Nr 5 (9), pp 109-115

ABSTRACT: A conventional plane problem on the stability of foundations as described below is solved by an approximated method. Constant pressures are specified along the negative semiaxis x which is the straight horizontal boundary of ponderable earth and the problem is to determine the minimum pressure along the positive semiaxis x . In order to obtain an approximate analytical solution, the author proceeds on the basis of analytical solutions for identical problems for similar cases of a weightless medium as well as for cases of a medium having weight and sets for himself the task of tracing the slip lines for one of the families of solutions. For axisymmetrical problems this method was proposed by V. G. Berezantsev

Card 1/2 [Osesimmetrichnaya zadacha teorii predel'nogo ravnovesiya

SOV/124-58-3-3278

On a Problem of the Theory of Ultimate Equilibrium

sypuchey sredy (Axisymmetrical Problem of Ultimate-equilibrium Theory of a Cohesionless Medium), Moscow, Gostekhizdat, 1952.] No mention of evaluating the errors of the solution is made.

G. S. Shapiro

Card 2/2

ARCHASHNIKOV, V. P.

"Calculating Stresses in Intercameral Pillars in the Case When floor and Roof Remain"

"On the Problem of Determining the Pressure on the Supports [Sets] in Horizontal Mining"

Trudy, t. 1. Transactions of the Mathematics and Mechanics Section, Kazakh SSR, Acad. Sci., Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1958, 207pp.

ARCHASHNIKOV, V.P.

Calculating stresses in chamber pillars when blocks of untouched
ore are left on the roof and floor. Trudy Sekt.mst.i mekh.
AN Kazakh.SSR 1:133-139 '58. (MIRA 11:12)
(Mining engineering)

ARCHASHNIKOV, V.P.

Determining the pressure on the timbering of drifts. Trudy
Sekt.mat.i mekh.AN Kazakh.SSR 1:140-143 '58. (MIRA 11:12)
(Mining engineering)

COMMON ELEMENTS																										COMMON VARIANTS INDEX																									
OPEN MATERIALS INDEX																										PROCESS AND PROPERTIES INDEX																									
ARBUZOV, V. CA																										Improvement of sintering on agglomeration belts. A. Arbuzov. <i>Stal</i> 8, No. 3, 110 (1938); <i>Chem. Zvezda</i> 1938, II, 4119.—The principal condition necessary for satisfactory sintering is thorough and uniform mixing of the raw material. The C content should be 1.4-1.5% or more throughout the mix. For this reason the grain size of the coke should be less than 3 mm, when that of the ore is 0.12 and 0.16 mm. The ore fraction having a grain size of 12-30 mm, must not make up more than a third of the total ore charge. The addition of blast-furnace dust is beneficial. The total depth of the sinter layer should be about 200 mm. Wetting the sintered agglomerate with water reduces its mech. strength. M. G. Moore																									
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																										E-2																									
SANDORD #4																										SANDORD MAP ONLY ONE																									
SANDORD #4																										SANDORD MAP ONLY ONE																									

~~ARCHAVSKIY, I. A.~~

ARCHAVSKIY, I. A.

"Physiological Mechanisms for the Reorganization of Functions in Ontogenesis." (p. 41)
by Archavsky, I. A.

SO: Journal of General Biology; Contents of Vol. IX, No. 1. (Issues 1-6 for 1948).

ARCHEGOVA, I.B.

Humus composition of the tundra soils in the Vorkuta region. Izv.
Komi fil. Geog. ob-va SSSR no.9:78-82 '64.

(MIRA 18:5)

L 47410-66

ACC NR: AP6027757

SOURCE CODE: GE/0030/66/016/002/0729/0736

AUTHOR: Archipova, N. K. ; Klotsman, S. M. ; Timofeev, A. N. ;
Trakhtenberg, I. Sh. 24
B

ORG: Institute of Metal Physics, Academy of Sciences SSSR, Sverdlovsk

TITLE: Effect of a d-c field on the lattice diffusion of silver-110 in copper and
gold 14 27 27

SOURCE: Physica status solidi, v. 16, no. 2, 1966, 729-736

TOPIC TAGS: direct current field, lattice diffusion, silver 110, copper, gold,
electron drag, matrix conductivity, electromigration

ABSTRACT: A study is made of the effect of direct current, with a density
of about 100 to 150 amp/mm², on the diffusion of silver-110 in gold (99.99%) and
high purity grade copper, at temperatures above 800C. Diffusion of silver-110 is
measured by the residual activity method. The direction of the electromigration
and the magnitude of the activated ions "effective charge" is clear indication of
electron drag. The "effective charge" decreases linearly with an increase in

Card 1/2

L 47410-66

ACC NR: AP6027757

temperature. The temperature coefficient of the "effective charge" of silver in gold and copper is higher than the temperature coefficient of the matrix conductivity. Orig. art. has: 7 figures, 3 tables, and 10 formulas. [Authors' abstract]
[KS]

SUB CODE: 20/ SUBM DATE: 18Apr66/ ORIG REF: 011/ OTH REF: 006/

Card 2/2 vlr

L 55169-65

EWA(d)/EWP(v)/I/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l) Pf-4

23
B

JD

ACCESSION NR: AP5017639

RU/0017/64/000/008/0366/0370

AUTHOR: Architei, C. (Engineer)

TITLE: Drill-stems with an outer diameter of 250 millimeters (10 inches)

SOURCE: Metalurgia, no. 8, 1964, 366-370

TOPIC TAGS: drilling machine, engineering machinery, metal rolling, metal heat treatment

ABSTRACT: The author describes the production of a 250-millimeter drill stem, which is said to be superior to the existing 230-millimeter type. The manufacturing technology involves rolling, heat treatment and splintering. Orig. art. has: 7 tables, 3 figures, 12 formulas.

ASSOCIATION: Uzina de Tevi, Roman (Pipes Factory)

SUBMITTED: 00

ENCL: 00

SUB CODE:: IE, MM

NR REF SOV: 000

OTHER: 004

JPRS

Card 1/1

SOV/137-58-7-15375

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 206 (USSR)

AUTHOR: Archkov, Yu.I.

TITLE: On the Influence of Certain Factors on the Decarbonization of Steel Pipes by Hydrogen at Elevated Temperature and Pressure
(O vliyanii nekotorykh faktorov na obezuglerozhivaniye stal'-nykh trub vodorodom pri povyshennykh temperature i davlenii)

PERIODICAL: Tr. Leningr. tekhnol. in-ta im. Lensoveta, 1957, Nr 38, pp 204-215

ABSTRACT: The influence of the thickness of the walls and the inner diameter of pipes, also the magnitude of mechanical stresses occurring in the walls of pipes due to internal pressure on the decarbonizing process (D) of St 20 and 30 steel in an H₂ medium at 525°C and 100-300 atm pressure was investigated. The tests were conducted in a salt thermostat on tubular specimens. Stresses were found by means of calculations. The mean duration of tests was 200 hr. The depth of decarbonized layer was determined on an etched transverse polished section under a microscope with a magnification of 87 times. It is established that with different wall thicknesses and the same inner

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SOV/137-58-7-15375

On the Influence of Certain Factors on the Decarbonization (cont.)

diameter of cylinders and pipes the decisive factor in the process of D is the distribution of H_2 concentration through the depth of the wall. The thicker the wall, the greater is the depth of the decarbonized layer. An increase of the thickness of the wall and of the inner diameter of the specimen results in an increase in the depth of the decarbonized layer. Elastic stresses arising within the walls do not exert any substantial influence on the process of D.

V.S.

1. Carbon--Hydrogenation factors
2. Hydrogen--Applications
3. Pipes--Temperature

Card 2/2

ARCHVADZE, K.M.
USSR/ Geology - Minerals

Card 1/1 Pub. 46 - 10/24

Authors : Archvadze, K. M.

Title : Certain data about the microfaunistic characteristics of the
 Sakaraul'sk horizon of Abkhazia

Periodical : Izv. AN SSSR. Ser. geol. 6, 101-102, Nov-Dec 1954

Abstract : Brief report is presented on the microfaunistic properties of
 mineral deposits extracted from the Sakaraul'sk horizon of Central
 Abkhazia.

Institution :

Submitted : December 8, 1952

SABASHVILI, M.N., akademik; GULISASHVILI, V.Z., akademik;
KAVRISHVILI, L.N., agronom; YASHVILI, N.S., prof.;
ARCHVADZE, Sh.R., kand. ekon. nauk; SHENGELIYA, P.G.,
red.

[Natural resources of the Georgian S.S.R.] Prirodnye re-
sursy Gruzinskoi SSR. Moskva, Nauka. Vol.6. 1965. 274 p.
(MIRA 18:7)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Sovet po izuche-
niyu proizvoditel'nykh sil. 2. Akademiya nauk Gruz.SSR
(for Sabashvili, Gulisashvili).

ARCHVADZE, Sh. P.

1242. Voprosy tarmeshcheniya i dal'neyshego razvitiya v rayonakh Kakheti i Pishlennosti
pererabatyvaushchey spl'skokhozyaystvennoye syr'ya. Tbilisi, Izd-vo Akad. nauk Gruz.
SSR. 1954. 26s. 22sm. (Akad. nauk Gruz. SSR. In-t ekonomiki). 100ekz. Bespl.-
(54-55139)

SO: Knizhnaya Letopis, Vol. 1, 1955

TAVADZE, F.N., otv. red.; AGLADZE, R.I., red.; ARCHVADZE, Sh.R., red.;
 VACHNADZE, H.D., red.; GVELKSIANI, G.G., red.; GUDZHEDZHIANI, B.I., red.;
 DZHANELIDZE, A.I., red.; DZOTSENIDZE, G.S., red.; DURMISHIDZE,
 S.V., red.; KETSKHOVELI, N.N., red.; MIKELADZE, I.S., red.;
 RUBINSHTEYN, M.M., red.; TVALCHRELIDZE, A.A., red., [deceased];
 TSITSISHVILI, G.V., red.; SHENGELIYA, P.G., red.; FEODOT'YEV,
 K.M., red. izd-va.; GUSEVA, A.P., tekhn. red.

[Natural resources of the Georgian S.S.R.] Prirodnye resursy
 Gruzinskoi SSR, Moskva. Vol. 1. [Metalliferous minerals] Metallicheskie
 poleznye iskopaemye. 1958. 230 p. (MIRA 11:11)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Sovet po izucheniyu
 proizvoditel'nykh sil. 2. Chlen-korrespondent AN Gruz. SSR (for Tavadze).
 (Georgia--Ore deposits)

AUTHOR: Archvadze, Sh. R., Scientific Secretary to the 30-58-3-10/45
Council for the Investigation of the Productive
Power of AS Georgian SSR

TITLE: Meeting of the Council for the Investigation of the Productive
Power (Sessiya soveta po izucheniyu proizvoditel'nykh sil)

PERIODICAL: Vestnik Akademii Nauk SSSR, 1958, Nr 3, pp. 60-61
(USSR)

ABSTRACT: Since 1954 the council works on the problem "Economics and
organization of the agriculture in the suburban zone of
Tbilisi. Scientific institutes of the academy, as well as
non-academic institutions, universities, economical and
planning-authorities of the republic participated in this
work. Up till now, agricultural food stuffs must be brought
from far away to Tbilisi, a larger town. Agricultural under-
takings ought therefore to be established in the vicinity of
the town in order to improve the supplies for the inhabitants
of Tbilis and surroundings. A meeting of the council took
place under the participation of representatives of
scientific institutions, party and council-authorities, as

Card 1/3

Meeting of the Council for the Investigation of the
Productive Power

30-58+3-10/45

well as of a greater number of experts. The meeting was opened
by the vicepresident of AS Georgian SSR, G. S. Dzotsenidze.

The following reports by:

- 1) M. N. Sabashvili on climatic conditions
- 2) K. V. Kelendzheridze on the characteristic features of the
soils in the vicinity of Tbilissi
- 3) V. I. Matikashvili on forests in the surrounding area
- 4) K. A. Papelishvili on the amelioration of the surrounding
area of the town
- 5) G. A. Kvachadze on the cultivation of vegetables
- 6) Ye. G. Eristavi on fruit-culture
- 7) I. T. Rtskhiladze on viticulture
- 8) D. G. Agladze on cattle-breeding
- 9) A. I. Kakabadze on Kolkhoz-production
- 10) T. N. Kvlividze on problems of transportation
- 11) A. A. Gvelesiani on trade and commerce
- 12) N. S. Yashvili on the organization of agriculture follow

Card 2/3

Meeting of the Council for the Investigation of the
Productive Power

30-58-3-10/45

An increased agricultural production is expected only in the
years from 1965 to 1970. A special commission under the presidency
of N. N. Ketskhoveli, Member, AS Gruzinian SSR, was called.

Card 3/3

CHIKHELIDZE, S.S.; TAVADZE, F.N., akademik, otv. red; AGLADZE, R.I., red.;
ARCHVADZE, Sh.R., red.; VACHNADZE, N.D., red.; GVELISIANI, G.G.,
red.; GUDZHEDZHIANI, B.I., red.; DZHANELIDZE, A.I., red.;
 DZOTSENIDZE, G.S., red.; DURMISHIDZE, S.V., red.; KETSKHOVELI, N.N.,
 red.; MIKELADZE, I.S., red.; RUBINSHTEYN, M.M., red.; TVALCHRELIDZE,
 A.A., red.[deceased]; TSITSISHVILI, G.V., red.; SHENGELIYA, P.G.,
 red.; FEDOT'YEV, K.M., red.izd-va; DOROKHINA, I.N., tekhn. red.

[Natural resources of the Georgian S.S.R.] Prirodnye resursy Gru-
 zinskoi SSR. Moskva, Izd-vo Akad.nauk SSSR. Vol.3. [Mineral water]
 Mineral'nye vody. 1961. 438 p. (MIRA 14:12)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Sovet po izucheniyu pro-
 izvoditel'nykh sil. 2. Akademiya nauk Gruzinskoy SSR (for Tavadze).
 (Georgia—Mineral water)

GUDZHEDZHIANI, B.I.; CHICHUA, B.K.; PETROVSKIY, G.D.; KOMETIANI, G.A.;
AZMAYPARASHVILI, M.V.; AVALISHVILI, E.Ye.[deceased];
MIRZIASHVILI, T.M.; SHCHERBAKOV, D.I., glav.red.; ARCHVADZE, Sh.R.,
red.; BOGOLYUBOVA, L.I., red.; VAL'TS, I.E., red.; TAVADZE, F.N.,
red.; YABLOKOV, V.S., red.; PEVZNER, G.Ye., red.izd-va; MAKUNI, Ye.V.,
tekh. red.

[Coal atlas of the Caucasus] Atlas uglei Kavkaza. By B.I.Gudzhedzhiani
i dr. Moskva, Izd-vo Akad.nauk SSSR, 1961. 167 p. (MIRA 14:12)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Sovet po izucheniyu proiz-
voditel'nykh sil.

(Caucasus--Coal geology)

ARGICHOWSKI, Stanislaw, inz.

Transistor converters. Wiad elektrotechn 28 no.4:86-88 Ap
'61.

1. Centralne Laboratorium Akumulatorow i Ogniw, Poznan.

HUNGARY/Nuclear Physics - Physical Base of Nuclear and
Thermonuclear Technology.

C

Abs Jour : Ref Zhur Fizika, No 1, 1960, 672
Author : Arcimovics, L.A.
Inst : -
Title : Research on Controllable Thermonuclear Reactions in
the USSR
Orig Pub : Fiz. szemle, 1959, 9, No 2, 44-51
Abstract : See Referat Zhur Fizika, 1959, No 7, 14997; No 9,
19832.

Card 1/1

- 33 -

ARCT, B.

"With a Fresh Eye", p. 788, (SKRZYDLATA POLSKA, Vol. 10, No. 50, Dec. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

ARCT, B.

Storks are attacking a "hawk"; a short story. (Conclusion) p. 5. (SKRZYDLATA
POLSKA, Warszawa, Vol. 11, no. 3, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955,
Uncl.

ARCT, B.

Wings at our shoulders; a song, p. 5. (SKRZYDLATA POLSKA, Warszawa, Vol. 11, no. 3, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955, Uncl.

ARCT, B.

Frenchmen on the International Glider Contest, p. 6. (SKRZYDLATA POLSKA, Warszawa, Vol. 11, no. 3, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4, Jan. 1955, Uncl.

ARCT, B.

new

The kind of glider that we need, p. 7. (SKRZYDLATA POLSKA, Warszawa, Vol. 11, no. 3, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.

PHASE I BOOK EXPLOITATION

POL/4297

Arct, Bohdan

Samoloty Świata (Aircraft of the World) Warsaw, Wyd-wo Ministerstwa Obrony
Narodowej, 1959. 357 p. 7,000 copies printed.

Ed.: A. Duma; Tech. Ed.: Z.Płatek.

PURPOSE: This book is intended for the general and technical reader interested
in the development of aircraft.

COVERAGE: This book presents a historical survey of the world's leading aircraft.
More than 5,000 aircraft are listed together with brief technical specifications,
performance ratings, and photographs. The entries are arranged alphabetically
according to manufacturer and chronologically according to the date of manufac-
ture. Armament and bomb-carrying capacity are indicated for military aircraft.
An index of national insignia and markings for aircraft is provided. The author
thanks Eugeniusz Banaszczyk and engineers Andrzej Glass and Wacław Markowski.
There are 37 references: 17 English, 7 German, 4 Soviet, 4 French, 3 Polish,
1 Czech, and 1 Italian.

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Aircraft of the World

POL/4297

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AVAILABLE: Library of Congress (TL 670.A68)

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AG/dwm/sfm
10/10/60

ARCT, B.

The first Polish aerial millionaire.

WOJSKOWY PRZEGLAD LOTNICZY. (Dowodztwo Wojsk Lotniczych) Warszawa, Poland,
Vol. 12, no. 5, May 1959

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 8, August, 1959

Uncl.

30(6)

POL/7-59-28-17/26

AUTHOR: Arct, Bohdan

TITLE: Conquest of an Ocean

PERIODICAL: Skrzydlata Polska, 1959, Nr 28, pp 10-11 and p 15
(POL)

ABSTRACT: This is a historical article about the flights over
the Atlantic made on 3 July 1928 and 15 July 1929
by the Polish pilot Idzikowski and navigator Kubala.
There are 2 photos.

Card 1/1

ARCT, Jacek; ECKSTEIN, Zygmunt; GWIAZDECKA, Irena; KRZYWICKA, Hanna

Possibilities of utilizing 2,4,5- trichlorophenol in the synthesis of pesticides. Przem chem 41 no.10:582-586 0 '62.

1. Katedra Technologii Organicznej II, Politechnika Warszawa i Państwowy Zakład Higieny, Warszawa.

ARCT, Jacek; ECKSTEIN, Zygmunt; KRZYWICKA, Hanna

Bacteriostatic activity of o-hydroxybenzyl alcohol derivatives.
Przem chem 43 no. 2: 87-91 F '64.

1. Katedra Technologii Organicznej II, Politechnika, Warszawa
i Panstwowy Zaklad Higieny, Warszawa.

ARCT, J.; CZERWINSKA, E.; ECKSTEIN, Z.; EJMOCKI, Z.; KOWALIK, R.; SOBOTKA, W.;
ZUKOWSKI, E.

Properties and fungicidal activity of aryloxyalkanehydroxamic
acids. Pt.7. Bul chim PAN 12 no.7:465-470 '64.

1. Department of Organic Technology II of Warsaw Technical
University and Mycological Laboratory of the Institute of
Organic Industry, Warsaw. Submitted May 11, 1964.

ARCT., W.

Fixed immediate dressing. Polski przegl.chir. 26 no.11 Suppl.:73-77
1954.

(BANDAGING AND DRESSING,
fixed immediate dressing)

ARCT, Witold

Observations on importance of tularemia at the outpatient service of a surgical clinic. Polski przehl. chir. 26 no.11: 961-966 Nov 54.

1. Ze Szpitala Powiatowego im. Heliadora Swiecickiego w Kamieniu Pomorskim i z Przychodni Obwodowej w Kamieniu Pomorskim. Dyrektor Szpitala i kierownik przychodni: dr med. W.Arct.

(TULAREMIA,
clin. aspects)

ARCT, Witold

Unusual case of degeneration of Hoffa's adipose body consecutive to knee injury. Chir. narz. ruchu 20 no.1:77-81 1955

1. Z Oddz. Chirurgicznego Szpitala Pow. im. H.Swiesickiego w Kamieniu Pomorskim. Dyrektor: dr med. W.Arct.

(KNEE, wounds and injuries,

causing hypertrophy of Hoffa's body)

(WOUNDS AND INJURIES,

knee, causing hypertrophy of Hoffa's body)

(HYPERTROPHY AND HYPERPLASIA,

Hoffa's body, caused by knee inj.)

ARCT, Witold

Traumatic injuries of the peripheral nerves. Chir. narz. ruchu
21 no.4:379-392 1956.

1. Z Oddziału Ortopedyczno-Urazowego Wojewódzkiego Szpitala w
Opolu Ordynator: dr. W. Arct. Praca wpłynęła: 13.11.1956 r
Adres autora: Opole, ul. Prusa 2 m. 14.
(NERVES, PERIPHERAL, wounds and injuries,
(Pol))

ARCT, Witold (Opole, ul. Prusa 2 m. 14.)

A case of hemangioma of the knee capsule. Chir. narz. ruchu 13 no.2:
177-179 1958.

1. Z Oddziału Ortopedyczno-Urazowego Wojewodzkiego Szpitala w Opolu
Ordynator: dr W. Arct.

(KNEE, neoplasms

hemangioma, case report (Pol))

(ANGIOMA, case reports

hemangioma of knee capsule (Pol))

ARCT, Witold (Opole, ul. Prusa 2 m.14)

Cysts of the semilunar cartilages of the knee. Chir.narz. ruchu
23 no.1:47-50 1958.

1. Z Oddziału Ortopedyczno-Urazowego Wojewodzkiego Szpitala w Opolu.
Ordynator: dr W. Arct.

(KNEE, cysts,
meniscal cysts, surg. (Pol))

ARCT, W. (Opole, ul Zajaczka 20 m. 2)

Neurofibroma sarcomatosum; report of four cases. Chir. narz. ruchm 23
no.3:287-292 1958.

1. Z Oddziału Ortopedyczno-Urazowego Wojewodzkiego Szpitala w Opolu
Ordynator: dr med. W. Arct.
(FIBROSARCOMA, case reports,
(Pol))

ARCT, Witold; PIZIO, Zdzisław

Agricultural accidents. Chir. narz. ruchu 24 no.2:93-98 1959.

1. Z Oddziału Ortopedczno-Urazowego Szpitala Wojewodzkiego w Opolu
Ordynator: dr. w Arct Praca wpłynela:29. I.58r. Adres autorow: Opole,
ul. Zajaczka 20 m. 2.

(ACCIDENTS, INDUSTRIAL,
farm accid. (Pol))

ARCT, Witold

Osteoarticular tuberculosis in the Opole region. Gruzlica 27
no.6:527-534 June 59.

1. Z Gabinetu Gruzlicy Kostno-Stawowej Kierownik: dr W. Arct
Wojewodzkiej Przychodni Przeciwgruzliczej w Opolu Dyrektor:
dr B. Pilecki z Oddziału Ortopedyczno-Urazowego Szpitala Woj-
ewodzkiego w Opolu Ordynator: dr W. Arct Dyrektor: dr B. Glazer
z Oddziału Gruzlicy Kostno-Stawowej Szpitala Powiatowego w
Namyslowie Dyrektor Szpitala: dr R. Przybyszewski.
(TUBERCULOSIS OSTEOARTICULAR, epidemiol.)

ARCT, Witold

Osteoarticular tuberculosis in geriatrics. Gruzlica 28 no.10:
793-800 O '60.

1. Z Gabinetu Gruzlicy Kostno-Stawowej Wojewodskiej Przychodni
Przeciwgruzliczej w Opolu, Dyrektor Przychodni: dr B.Pilecki;
Kierownik Gabinetu: dr med. W. Arct. Z Oddzialu Ortopedyczno-
Urazowego Szpitala Wojewodzkiego w Opolu, Dyrektor Szpitala:
dr B. Glazer; Ordynator Oddzialu: dr med. W.Arct. Z Oddzialu
Gruzlicy Kostno-Stawowej Szpitala Powiatowego w Namyslowie,
Dyrektor Szpitala: dr R. Przybyszewski.

(TUBERCULOSIS OSTEOARTICULAR in old age)

ARCT, Witold; PIZIO, Zdzislaw

Fistulography and abscessography in osteoarticular tuberculosis. Chir.
narzad. ruchu ortop. pol. 27 no.5:611-619 '62.

1. Z Oddzialu Ortopedyczno-Urazowego Szpitala Wojewodzkiego w Opolu
Ordynator: dr W. Arct.

(TUBERCULOSIS OSTEOARTICULAR)

ARCT, Witold ,dr.

Abscesses in osteo-articular brucellosis. Chir. narzad. ruchu
ortop. Pol. 28 no.7:981-986 '63

Clinical and radiographic aspects of brucellosis of the knee
joint. Ibid.:1055-1060

1. Z Oddziału Chirurgii Osteopedycznej Szpitala Wojewódzkiego
im. K. Miarki w Opolu (Ordynator: dr. W. Arct).

ARCT, Witold; PONIATOWSKA, Teresa

Albright's syndrome. Endokr. Pol. 15 no.1:45-55 Ja-F '64.

1. Oddział Chirurgii Ortopedycznej Szpitala Wojewódzkiego im.
K. Miarki w Opolu (Kierownik: dr. med. W. Arct) i I Klinika
Płodnicza i Chorob Kobietych w Warszawie (Kierownik: prof.
dr. T. Bulski).

ARCT, Witold; MAZUR, Jan

Plano-cellular carcinoma of the apex of the leg stump. Chir.
narzad. ruchu ortop. Pol. 29 no.6:759-761 '64

1. Z Oddziału Chirurgii Ortopedycznej Szpitala Wojewodzkiego
w Opolu (ordynator: dr. med. W. Arct).

ARCT, Witold, dr. med.; PIZIO, Zdzisław

The use of Salter's method in the surgical treatment of congenital dislocations of the hips. Chir. narząd. ruchu ortop. Pol. 30 no.1:63-66 '65.

1. Z Oddziału Chirurgii Ortopedycznej Szpitala Wojewódzkiego im. Karola Miarki w Opolu (Ordynator: dr. med. W. Arct).

ARCT, Witold, dr. med.

Reconstruction of the lateral malleolus after anatomical resection for osteoclastoma. Chir. narzad. ruchu ortop. Pol. 30 no.2: 205-208 '65.

1. Z Oddziału Chirurgii Ortopedycznej Szpitala Wojewodzkiego imeni K. Miarki w Opolu (Ordynator Oddziału: dr. med. W.Arct).

ARCT, Witold

Antero-lateral decompression of the spinal cord in *malignant* tumors of the spine with neurological complications. (Preliminary report). Chir. narzad. ruchu ortop. Pol. 30 no.4: 401-404 '65.

1. Z Oddziału Chirurgii Ortopedycznej Szpitala Wojewodzkiego im. K. Miarki w Opolu (Ordynator: doc. dr. med. W. Arct).

ARCT, Witold; MAZUR, Jan

A case of atypical fracture of the radial epiphysis complicated by damage of the median nerve. Chir. narzad. ruchu ortop. Pol. 30 no.3:283-285 '65.

1. Z Oddziału Chirurgii Ortopedycznej Szpitala Wojewódzkiego im. K. Miarki w Opolu (Ordynator: dr. med. W. Arct).

ARCZ, M.

ARCZ, M. Management problems in the Taira Mountains. p. 6, No. 4, April 1956.
Poland, Warszawa
Turysta

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

ARCZYNSKI, M.

A circle of the Polish Tourist and County Lore Association
in every industrial establishment. p. 3. TURYSTA. (Polskie
Towarzystwo Turystyczno-Krajoznawcze) Warszawa. No. 3, Mar. 1955.

SOURCE: East European Accessions List, (EEAL), Library
of Congress, Vol. 4, no. 12, December 1955

ARCZYNSKI, M.

1st High Mountain Skiing Expedition. p. 10. TURYSTA. (Polskie
Towarzystwo Turystyczno-Krajoznawcze) Warszawa. No. 5, May 1955.

SOURCE: East European Accessions List, (EEAL), Library of
Congress, Vol. 4, no. 12, December 1955

ARCZYNSKI, M.

S. Ziemia's Sladami dwoch desek (Following Two Wooden Planks); a book review. p. 22.
ma. Wodami Polski; a review of a periodical. p. 22.
No. 8, Aug. 1955. TURYSTA. Warsaw, Poland.

So: Eastern European Accession. Vol 5, no. 4, April 1956

ARCZYNSKI, M.

Collective tourist excursions. p.6.

TRYSTA. (Polskie Towarzystwo Turystyczne-Krajowcow) Warszawa.
No. 3, Mar. 1956

So. East European Accessions List Vol. 5, No. 9 September, 1956

ARCZYNSKI, M.

Tourists as cohosts of tourist homes. p. 10. TURYSTA.
(Polskie Towarzystwo Turystyczno-Krajoznawcze) Warszawa.
No. 6, June 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress
Vol. 5, No. 11, August 1956.

ARCZYNSKI, M.

ARCZYNSKI, M. Spring snow. p. 8, No. 4, April 1956. Poland, Warszawa
Turysta

SOURCE: East European Accessions List (EEAL) Vol. 6, N^o. 4--April 1957

ARCZYNSKI, M.

ARCZYNSKI, M. Skis, bindings, and other equipment. p. 7.

Vol. 28, no. 1, Jan. 1956

TURYSTA

Poland

So: East European Accession, Vol. 6, No. 5, May 1957

ARCZYNSKI, M.

ARCZYNSKI, M. New forms and methods of work. p. 3.

Vol. 28, no. 10, Oct. 1956

TURYSTA

Poland

So: East European Accession, Vol. 6, No. 5, May 1957

ARCZYNSKI, M.

ARCZYNSKI, M. The North Albanian Alps. p. 17.

Vol. 28, no. 10, Oct. 1956

TURYSTA

Poland

So: East European Accession, Vol. 6, No. 5, May 1957

ARCZYNSKI, S.

Polish Technical Abst.

No. 1 1954

Mechanics, Electrotechnics, Power

2817

629.113 : 620.15

✓ Arczynski S. Resistance Tensometers for Determining Stresses in Automobile Constructions.

„Zastosowanie tensometrów oporowych do pomiaru naprężeń w konstrukcjach samochodowych”. Technika Motoryzacyjna. No. 2, 1953. pp. 59—62, 5 figs., 1 tab.

The principle of determining stresses by means of electric resistance tensometers. Description of equipment for determining stresses under static load. The technique of effecting stress tests. Review of experiments carried out at the Office of Designs of the Motor Industry on stress measurements in a P3 trailer frame and in MO4 and MO5 motor cycle frames

ARCZYNSKI, S.; KAMINSKI, E.

From practical experience in applying tensiometric tests. p.106
TECHNIKA MOTORYZACYJNA (Naczelna Organizacja Techniczna) Warszawa
Vol. 6, no. 4, Apr. 1956

So. East European Accessions List Vol. 5, No. 9 September 1956

ARCZYŃSKI, S., KAMINSKI, E.

The subsurface layer in automobile construction materials. p. 239.

TECHNIKA MOTORZACYJNA. (Naczelna Organizacja Techniczna) Warszawa, Poland.
Vol. 9, No. 6, June 1959.

Monthly List of East European accession (EEAI), LC. Vol. 8, No. 9 September,
1959. Uncl.

LISENKO, N.V., dotsent; ARDABATSKAYA, G.A.

Late results of a formalin-resorcinol treatment of chronic periodontitis of multirrooted teeth in children. Stomatologiya 42 no.3: 14-16 My-Je'63 (MIRA 17:1)

1. Iz kafedry terapevticheskoy stomatologii (zav. - prof. Ye. Ye. Platonov) Moskovskogo meditsinskogo stomatologicheskogo instituta.

LEUSHIN, N.I., kand. fiz.-matem. nauk; ARDAB'YEVSKAYA, L.N.

Amount of lightning in the summertime on the territory elucidated
by the Central Asian group of thunderstorm direction finding.
Meteor. i gidrol. no.12:31-34 D '65. (MIRA 18:11)

1. TSentral'nyy institut prognozov.

3(2)

AUTHOR: Ardab'yeva, Ye. I.

SOV/6-59-6-1/22

TITLE: On the Editorial Work in Aerogeodetic Enterprises and the Improvement in Quality of Topographic Maps (O redaktsionnykh rabotakh v aerogeodezicheskikh predpriyatiyakh i ob uluchshenii kachestva topograficheskikh kart)

PERIODICAL: Geodeziya i kartografiya, 1959, Nr 6, pp 3 - 8 (USSR)

ABSTRACT: At the Conference of chiefs of stereotopographic and cartographic workshops and chief-engineer editors of the aerogeodetic enterprises organized in 1958 by the GUGK (Glavnoye upravleniye geodezii i kartografii) (Main Administration of Geodesy and Cartography), problems of improvement in topographic maps were discussed, and new organization editorial work was established. In the same year, the GUGK confirmed the new decree concerning the chief-engineer editor of the enterprise, and the engineer editors of topographic maps, as well as their program. It was decided that editorial work should be carried out in the main stages of production of topographic maps, starting from technical projecting and closing with the preparation of the compilation map. At the end of 1958, the personnel

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On the Editorial Work in Aerogeodetic Enterprises and
the Improvement in Quality of Topographic Maps

SOV/6-59-6-1/22

of enterprises has provided for a number of editors necessary for carrying out the work intended. The new organization was discussed by the group seminars for engineer editors of aerogeodetic enterprises early in 1959, and was approved by them. In spite of this, there are still some essential shortcomings. They are pointed out here: Workers are employed in editorial work who have no theoretical training and no experience. In the allotment of editors, the volume and complicity of work is not considered. Only 50% of editors are usually allotted to topographic squads while the rest are employed in indoor service. Editors of topographic squads are studying their field of work very insufficiently; they are imperfectly collecting the necessary data, do not investigate the terrain on the spot, and do not take part in indoor work for preparing the map. Execution and content of topographic maps still show a great many shortcomings which are pointed out here. Topographic identification is being carried out imperfectly and negligently. A number of such imperfect identifications are pointed out. In order to employ topographers in a more useful way in winter,

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On the Editorial Work in Aerogeodetic Enterprises and
the Improvement in Quality of Topographic Maps

SOV/6-59-6-1/22

and to increase their efficiency, it was decided to charge the topographic squads with work of map construction. This work is, however, badly organized, and shows a number of shortcomings. The growing importance of the editor, and his obligations according to the decree of the GUGK of September 15, 1958, are mentioned.

Card 3/3

VOL'PE, Rem Isaakovich; PODOBEDOV, Nikolay Sergeyevich; TROITSKIY, B.V.,
retsenzent; ARDAB'YEVA, Ye.I., red.; SHAMAROVA, T.A., red. izd-
va; SINGUROV, V.S., tekhn. red.

[Topographical interpretation of aerial photographs in the compila-
tion of maps at scales of 1:10 000 and 1:25 000] Topograficheskoe
deshifrirovaniye aerosnimkov pri sozdaniy kart masshtabov 1:10 000
i 1:25 000. Moskva, Izd-vo geodez. lit-ry, 1961. 255 p.
(MIRA 15:2)

(Photographic interpretation)

ARDAB'YEVSKIY, A.I.; VOROPAYEVA, V.G.; GRINEVA, K.I.; VISHNEVSKIY, A.Ya.,
inzhener, redaktor; LATININ, Ye.V., inzhener, zaveduyushchiy
redaktsiy; SHEKHMAN, E.A., izdatel'skiy redaktor; ROZHIN, V.P.,
tekhnicheskiiy redaktor.

[Manual on calculations for super-high frequency antennas] Posobie
po raschetu antenn sverkhvysokikh chastot. Pod obshchei red. K.I.
Grinevoi. Moskva, Gos. izd-vo obor. promyshl. 1957. 70 p.

(Antennas (Electronics))

(MLRA 10:4)

ARDAB'YEVSKIY, A.I.; CHEKAN, A.V.

Optical masers. Izv. vys. ucheb. zav.; radiotekh. 6 no.4:
327-356 J1-Ag '63.
(MIRA 16:11)

L 11048-65 EWT(1)/EWT(m)/EEC-1/EEC(t)/EEC(b)-2/FCS(k) Pac-1/Pae-1/P1-1
 PJ-1/P1-1 AFTC(b)/ASD(a)-5/ASD(d)/AFETR/ESD/RAEM(a)/ESD(c)/ESD(g)/ESD(h)
 ACCESSION NR: AT4046227 JD/WR 8/2535/64/000/159/0018/0032

AUTHOR: Ardab'yevskiy, A.I., Candidate of technical sciences

TITLE: The use of standard waveguides in antennas with frequency scanning 25B

SOURCE: Moscow. Aviatsonnyy institut. Trudy*, no. 169, 1964. Skaniruyushchiye anteny* sverkhvy*sokikh chastot (Super-high frequency scanning antennas), 18-32

TOPIC TAGS: antenna theory, frequency scanning, waveguide, delay system, superhigh frequency

ABSTRACT: In antennas with frequency scanning, the beam is swung by varying the electrical distance between the radiating elements, which are driven by a traveling wave, as the generator frequency is changed. When employing delay systems of the ribbed surface type, zigzag waveguides or helical waveguide configurations, high angular-frequency sensitivity for the antennas can be achieved. However, the considerable losses in delay systems with high angular-frequency sensitivity do not permit the design of an antenna with high efficiency and a narrow radiation pattern. Moreover, such delay systems are complicated to produce, this being an additional factor which limits their applicability. Standard waveguides possess relatively low losses, and are designed with a high degree of accuracy and precision, while the technology of their manufacture is simple and has been

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thoroughly studied and industrially introduced. For this reason, frequency-scan antennas in which standard waveguides are used for displacement of the beam are considered in this article. It should be noted that the study presented in the paper is based on a standard rectangular waveguide operating with the H_{10} wave mode. The basic characteristics of such a waveguide are determined (in a practical system of units) by the following functions: phase velocity delay, maximum transmitted power and attenuation constant. Various possibilities of shifting the radiation pattern are analyzed and graphs are given which show the radiation zones and swing angles for radiators variably-phase connected with the traveling wave. The author analyzes the relation existing between the width of the radiation pattern and the efficiency of the antenna, discussing the types of radiators which may be conveniently used in an antenna system in which the elements are driven by means of a traveling wave. The limits of compression of the radiation pattern, as fixed by losses in the waveguides, are considered, along with techniques for the reduction of frequency drift. The author demonstrates that narrow radiation patterns incapable of achievement when high group-delay systems are used, can be obtained by the use of standard or regular waveguides in frequency-scan antennas. Specifically, by using parallel-waveguide systems with switched feed, one can achieve a large swing sector with low frequency drift and high antenna efficiency. In order to

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cover a swing sector of 180° with feed switching and 10% frequency drift, it is sufficient to use from four to seven alternately connected parallel waveguides, depending on the loss requirements in the antenna. Reduction of the cross-sectional dimensions of the antenna requires that the waveguides be so arranged that the H plane coincide with the radiation plane. For further reduction of the transverse dimensions, waveguide dimensions in the E plane must be decreased. A change in this dimension has no effect on the dispersal characteristics of a waveguide operating in the H_{10} mode. Thus, the consideration proposed in the article remains valid. A formula is given for the computation of the increase in losses occasioned by the reduction of the E plane dimension. The same expression may be used to make allowance for the expansion of the critical pattern. The author notes that the use of rectangular waveguides for the purpose of achieving maximally narrow radiation patterns is limited, with respect to frequency band, on two sides. As the wavelength is shortened, the maximum pattern is expanded in inverse proportion to $\sqrt{\lambda}$. Thus, when the wavelength becomes short enough, a rectangular waveguide may not make possible the attainment of a sufficiently narrow radiation pattern. In this band, a surface-wave system may be used in place of the waveguide. If the delay is small enough, a system of this type has low dispersion and less losses than a waveguide. As the generator wavelength increases, the transverse dimensions of the waveguide increase and, after a certain point has been reached, become unacceptable from the point of view of design. In this band, in place of the waveguide, the author suggests the use of coaxial lines in which, as the

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wavelength grows longer, losses become rather small. Since a coaxial line is non-dispersive, while a surface wave over a ribbed surface at delay close to unity has small dispersion, if such lines are used a greater frequency drift or greater number of parallel channels will be required than the waveguides to provide coverage over a given swing sector. Orig. art. has: 6 figures and 20 formulae.

ASSOCIATION: Moskovskiy aviatsionnyy institut (Moscow Aviation Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: EC

NO. 11048-65

ORIGIN: 11048-65

Card 4/4

NECULA, Paul; ARDAC, Mihai; IONESCU, Mircea; ANGHEL, Nicolae; RUSU, Ion;
VAGAUNESCU, C., ing.

News from a construction site. Constr Buc 15 no.722:1 9 N '63.

ARDAMATSKAYA, A.N.

Acute abdomen syndrome of venous origin. Vest.khir. 75 no.4:102-
107 My '55. (MLRA 8:8)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav.-prof. P.N.
Napolkov) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo
instituta Leningrad, bol'nitsa im. Mechnikova, pav. 13.

(ABDOMEN, ACUTE, etiology and pathogenesis,
venous disord.)

(STOMACH, blood supply,
disord., in etiol. of acute abdom.)

ARDAMATSKAYA, A.N. (Leningrad, 11, Nevskiy pr., d.32/34, kv.72)

Pathogenesis of metastatic periperaphlebitis [with summary in English,
p.159] Vest.khir. 77 no.9:60-66 S '56. (MIRA 9:11)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (sav. - prof. P.N.Napalkov)
Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta
(~~PERIPHLEBITIS~~, etiol. and pathogen.
periparaphlebitis, metastatic)

ARDAMATSKAYA, A.N.

Variation of the cholate-cholesterol coefficient in cholecystitis.
Trudy ISGMI 74:140-153 '62. (MIRA 17:10)

ARDAMATSKAYA, A.N.

Determination of the cholate-cholesterol coefficient and the amount of bile acid salts in cirrhosis of the liver and portal hypertension. Vest. khir. 94 no.2:52-55 F '65.

(MIRA 18:5)

1. Iz kliniki khirurgicheskikh bolezney (zav. - prof. P.N. Napalkov) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

ARDAMATSKAYA, T.B.

Mixed egg laying of red-breasted merganser, sheldrake, and gadwall
in the Black Sea Preserve. Ornitologia no.7:456-457 '65.

(MIRA 18:10)